

CHAPTER 3

RESEARCH PROCEDURES

A. Design of the Research

This research used a qualitative descriptive case study design (Yin, 2018) to describe students' experiences in analyzing semiotic images of educational posters. The qualitative descriptive approach focused on presenting participants' perspectives in straightforward language without extensive theoretical interpretation. According to Mantula et al. (2024), this approach is suitable for novice researchers and effective for exploring participants' real experiences in natural contexts. The case study framework supported this by allowing an in-depth investigation of a specific group of English education students who had taken a related course. This design helped the researcher capture detailed, contextual insights while maintaining focus on the participants and the educational setting.

B. Focus of the Research

This study focused on exploring the experiences of university students in interpreting and analysing semiotic elements found in educational posters. The primary objective was to identify the challenges that students encountered during this process, particularly in applying theoretical concepts related to visual grammar and multimodal discourse. The research was grounded in the understanding that students often face difficulties when engaging with visual and textual elements simultaneously, especially when required to extract meaning from semiotic representations using academic frameworks.

The analysis specifically examined how students interpreted visual components such as salience, framing, composition, color, and information value key elements introduced in the "Grammar in Multimodal Discourse" course. These visual features are critical in understanding how messages are constructed and conveyed in educational posters. The study sought to determine the extent to which students were able to apply semiotic theories accurately and meaningfully, as well as how confident they felt in performing such analyses.

Ultimately, the study aimed to contribute to the broader academic discussion

surrounding semiotic education, particularly in the context of English language and literature programs. The findings are intended to inform educators, curriculum designers, and researchers about the practical applications and limitations of teaching visual grammar and multimodal analysis. Through this focus, the study offered valuable insights into how students internalized and applied theoretical concepts within real-world academic settings.

C. Setting and participants

This research was conducted among university students majoring in English major at a higher education institution in Indonesia. The participants were specifically chosen based on the assignment done by the participants which was analyzing educational posters to interpret the message or information the creator tried to deliver in a course titled "Grammar in Multimodal Discourse." This background provided them with foundational knowledge and experience in semiotic analysis. The course exposed students to theories related to multimodal texts, such as posters, and emphasized the application of visual grammar concepts, making the participants suitable for the study's objectives.

A purposive sampling technique was employed to select participants who met specific criteria. The researcher deliberately selected three students who had completed the multimodal discourse course. The three chosen participants are separated into three levels of ability based on their course grade. However, due to the course being in the sixth semester, the number of possible participants are limited. Therefore, the chosen ones are those who have finished enrolling in the course. The approach ensured that all participants had relevant experience in analysing semiotic features, particularly within educational posters. The selection aimed to gather detailed insights from students who had engaged directly with the concepts and challenges central to the research.

Participation in this study was entirely voluntary. Prior to data collection, each participant was fully informed about the purpose of the research, the methods used, and their rights as participants. They were also made aware that their responses would remain confidential and that their involvement would not affect

their academic standing in any way. To uphold ethical standards, informed consent was obtained from all participants before the interviews took place.

To protect the privacy of the individuals involved, the researcher used pseudonyms in all documentation and analysis. Any identifying information was excluded from the final report. Ethical considerations were consistently maintained throughout the research process in accordance with accepted standards for qualitative research involving human participants. This careful approach ensured that the study was conducted with respect, transparency, and responsibility.

D. Technique of Collecting the Data

This data collection technique used in this study was semi-structured interviews. This was chosen for its ability to balance flexibility and focus, allowing the researcher to ask predefined questions while also probing deeper based on participants' responses. Seidman (1991) noted that interviews were effective for exploring the meanings participants assigned to their experiences. The semi-structured format allowed the researcher to explore specific challenges when analysing semiotic aspects of posters.

The interviews were conducted online using Google Meet and Zoom, where participants were recorded while answering the questions. Follow-up clarification was sought when needed. The questions were based on the theoretical framework provided by Kress and van Leeuwen's (2006) *Grammar of Visual Design*, covering elements such as salience, composition, information value, and modality.

Each interview lasted, on average, 20 to 35 minutes. Participants were allowed to express their thoughts in Indonesian to reduce the risk of miscommunication and ensure comfort. The semi-structured format provided space for participants to elaborate on specific experiences and discuss their thought processes when encountering Semiotic Images.

E. Technique of analysing the Data

Thematic analysis was employed to examine the qualitative data obtained from semi-structured interviews. This technique is commonly used in qualitative research to identify and interpret patterns or themes within data. The analysis

involved systematically coding and categorizing participants' responses to uncover recurring ideas related to the research focus. This study followed Braun and Clarke's (2006) six-phase framework: familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This approach provided a structured and reliable means of capturing key insights from participants' experiences with semiotic analysis.

1. Familiarizing with the data

The first step in thematic analysis was to become thoroughly familiar with the data. After the interviews were completed and transcribed, the researcher read through each transcript several times to get a sense of the overall content. During this phase, initial thoughts and impressions were recorded, which helped inform subsequent analysis stages. This familiarization process was essential for developing an intuitive understanding of the breadth and depth of the participants' experiences with Semiotic analysis.

Table 1

Generating Initial Codes of the Data

image,	"Especially when it's related to image or colors or icons. Probably personally, I still find it hard to analysing the visuals rather than the text. So that's the challenge.
Text	"I find it hard when finding the connotation meaning to distinguish it still. Like, is it really literal or denotative or is it connotative?"

2. Generating initial codes

The second step of the analysis was to create initial codes. Coding is the process of identifying and labeling parts of the data that are relevant to the research questions. The researcher manually highlighted phrases, sentences, or paragraphs that reflected recurring patterns or significant insights from the participants. For instance, initial codes such as "cultural misunderstanding," "subjective or biased interpretation," "confusion applying theory," and "peer/lecturer discussion" were derived from participants' descriptions of their experiences. This coding process was iterative, with codes being refined, merged, or expanded as the researcher

engaged more deeply with the transcripts and identified patterns across the data.

Table 2
Generating Initial Codes of the Data

Participant Quote	Initial Code
“Especially when it's related to image...Probably personally, I still find it hard to analysing the visuals rather than the text. So that's the challenge.”	images
“I find it hard when finding the connotation meaning to distinguish it still. Like, is it really literal or denotative or is it connotative?”	text
Understanding colors, for me personally, it is more harder than the other specific types of multimodal composition because color is more abstract and every different types of places is having different meaning	Color
I have limited knowledge about that, what I will definitely catch is misunderstanding, misinterpreting.	Culture
So in my opinion, semiotic theories are kind of more abstract and kind of I'm not sure. I am not sure how to apply the concept	Limited knowledge
"The layout is messy. I don't know what to look at first. Is the poster trying to focus on the image or the text?"	theory

Table 3
List of Initial Codes and Their Frequencies

No.	Initial Codes	Total
1	Color	5
2	Knowledge	6
3	Culture	8
4	Interpreting Images	4
5	Text	7

3. Searching for themes

Following the initial coding, the codes were organized into larger categories or themes. A theme is a pattern in data that captures something significant about the

participants' experiences and answers the research questions.

Table 4
Developing Themes

No.	Initial Codes	Potential Themes
1	Images	Challenges in Interpreting Images
2	Text	Challenges in analysing Text
3	Color	Challenges in analysing Color
4	Culture	Challenges in Culture understanding
5	Knowledge	Challenges in Limited knowledge of Theory

4. Reviewing themes

The themes were identified, and the researcher reviewed them to ensure that they were coherent and distinct from one another. This entailed determining whether each theme was supported by adequate data and effectively captured an important aspect of the participants' experiences. During this stage, some themes were merged, refined, or dropped if they overlapped with others or lacked sufficient evidence. The final set of themes was chosen because they provided a comprehensive and insightful representation of the challenges and solutions encountered during participants' Semiotic Analysis.

Table 5
Reviewing themes

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Reviewing themes

No	Themes
1	Challenges in Interpreting Images
2	Challenges in analysing Text
3	Challenges in analysing Color
4	Challenges in Culture understanding
5	Challenges in Limited knowledge of Theory

5. Defining and naming themes

After refining the themes, the next step was to define and name each one. This entailed clearly articulating what each theme represented and how it related to the larger research questions. Each theme was given a concise label that accurately reflected its central meaning. For example, the theme "Challenges in integrating modalities" was defined as participants' difficulty understanding how different modes (e.g., visual, textual) interacted to create meaning in Semiotic Images. These definitions helped to ensure consistency and clarity in the interpretation of data.

Table 6
Defining Themes

No.	Theme Title	Definition
1	Challenges in Interpreting Images	Refers to difficulties students faced in determining whether images in posters were literal, symbolic, or decorative, as well as identifying which visual elements carried meaning.
2	Challenges in analysing Text	Refers to difficulties in distinguishing between functional and decorative text, as well as between literal and connotative meanings, especially when the text used figurative language or stylized presentation.
3	Challenges in analysing Color	Refers to difficulties in interpreting the symbolic and cultural meanings of colors, which often varied by context and were not always intuitively understood by students.
4	Challenges in Culture understanding	Refers to difficulties in interpreting symbols, gestures, or design elements that were rooted in unfamiliar cultural traditions or contexts.
5	Challenges in Limited knowledge of Theory	Refers to difficulties in applying semiotic or multimodal theories learned in class to real poster analysis due to limited understanding of abstract concepts like salience, modality, or composition.

6. Producing the final report.

The final step of the thematic analysis was to compile the findings into a cohesive report. The report and details will be explained in chapter 4.

F. Research Schedule

Table 7

Time and Place of the Study

Description	Sept- Nov 2023	Dec 2023	June 2025	July 2025	Aug 2025	Nov 2025	Dec 2025
Research Proposal writing	■						
Research Proposal examination		■					
Data Collection			■				
Data Analysis				■			
Report					■		
Thesis Result Seminar						■	
Thesis Examination							■